## ABSTRACT

An integrated process for compounding a catalyst containing silicone rubber composition. The process is undertaken by introducing a treated or untreated filler into a mixer (1) and maintaining the filler in a highly turbulent, fluidized state at a temperature of from 80°C to about 350°C while introducing a polydiorganosiloxane and subjecting the resulting mixture to a shearing force sufficient to achieve an average particle size of from 1 to 1000 microns thereby forming a flowable organopolysiloxane powder composition. If the filler is untreated a treating agent is introduced into the mixer prior to, during, or after addition of the polydiorganosiloxane. The flowable organopolysiloxane powder composition is then directly transferred to a bulk solids cooling device (7) which cools the composition to a temperature below the decomposition and/or activation temperature of the catalyst for use in the composition. The bulk cooled flowable organopolysiloxane powder composition is then fed to a massing apparatus (8) such as an extruder, and is massed at a temperature below the decomposition and/or activation temperature of the catalyst which is added into the composition prior to, during, or after massing at a temperature below the decomposition and/or activation temperature of the catalyst.